CEC-8 (Revised 04/16)



BULLET OPPORTUNITY

CLASSIFICATION: UTILITIES ENGINEER

Training and Development Assignments may be considered.

TENURE: **PERMANENT** 

TIME BASE: FULL TIME

SALARY: RANGE A - \$5,327 - \$6,352

RANGE B - \$6,100 - \$7,632

RANGE C - \$7,055 - \$8,827

RANGE D - \$7,974 - \$9,978

LOCATION: DOWNTOWN SACRAMENTO, CA

**ENERGY GENERATION RESEARCH OFFICE** 

**ENERGY RESEARCH AND DEVELOPMENT DIVISION** 

FINAL FILING DATE: UNTIL FILLED

The incumbent performs mechanical, electrical, and civil engineering work in the design, construction, operation and maintenance of the electricity system or natural gas system while considering climate change and other environmental impacts; conducts investigations and prepares reports involving engineering economic work, which includes studies of capital costs, financial structure, depreciation, physical plant inspections, valuations, revenues, and expenses.; conducts technical analyses and provides direction in the development of research engineering projects funded by the Energy Commission on energy related environmental areas, including climate change. Contributes engineering skills when reviewing and/or preparing engineering and environmental studies or evaluations and assists the management with program planning and implementation of projects addressing energy policy. Energy related climate change research requires a broad expertise on power generation, the electric grid, and the energy system in general. For this reason, the incumbent is knowledgeable of multiple aspects of engineering such as energy/mass balances, thermodynamics, fluid mechanics, combustion, strength/properties of materials, statistical analyses, testing of equipment, and interpretation of technical codes/standards.

## **DUTIES/RESPONSIBILITIES:**

Provide engineering analysis/technical support including planning and organizing engineering projects on climate change and other energy related environmental topics. Serve as the technical lead over other engineering/technical personnel on complex engineering projects to support energy-related environmental research, including adaptation of the energy system to climate change. The projects for which the incumbent is responsible involve technical engineering issues relating to the energy system including components of the natural gas and electricity systems. In addition, the incumbent has technical expertise in the engineering aspects of power electronics, transmission and distribution equipment and power flow, energy efficiency, heating and air conditioning (HVAC), furnaces, steam boilers, engines, gas turbines, combined heat and power, conversion technologies and processes, and other technologies, components, and systems. Lead analysis of assessments of key engineering issues affecting the energy sector, including evaluations and analysis of energy/environmental trends and drivers, technological responses, identification of engineering problems, possible engineering solutions, and recommendations for research initiatives sponsored by the Commission. Participate in technical scoring committees and provides his/her engineering expertise in reviewing proposals and provides recommendations for project funding. Direct research project design/scope, task descriptions, review

#### (Cont'd)

and approve test plans and protocols, and review the content of final products. Subjects typically requiring engineering analysis and assistance include, but are not limited to:

- Management of large multiyear projects involving regional climate model development and climate projections designed to estimate the effect of climate change on the energy system requiring expertise on fluid mechanics, numerical methods, energy balances, and other engineering disciplines.
- ➤ Study of engineering issues relating to the potential effects of climate change on the energy system and the development of engineering adaptation/coping strategies. For example, the effect of high temperatures on the thermal and mechanical performance of power plants, cooling systems, transmission lines, transformers, and the performance of end use energy devices.
- Management of large—scale field studies on engineering aspects affecting the technical performance or environmental characteristic of different parts of the energy system on topics related to climate change. For example, the incumbent may be involved with studies on the interaction between the electricity system and wildfires in California or analysis of the environmental impacts resulting from electrification of services.
- ➤ Management of engineering projects involving the evaluation of options to reduce net greenhouse emissions from the electricity and natural gas system.

For the full duty statement, go to: https://www.energy.ca.gov/careers/jobs.php.

### **DESIRABLE EXPERIENCE/QUALIFICATIONS:** The successful applicant should have

- Demonstrated ability to conduct engineering, economic, and policy research and analysis, identify issues, and recommend effective courses of action.
- Demonstrated experience analyzing data and developing conclusions, including the use of spreadsheets and other quantitative tools for data analysis and graphical representation of results.
- Excellent oral skills and ability to effectively communicate in written form (i.e., technical reports, memos, letters, and comments).
- Demonstrated ability to handle multiple assignments with accuracy, to prioritize and meet deadlines, and to work well in a team environment with the ability to coordinate interdisciplinary projects.
- Demonstrated ability to establish and maintain cooperative and positive working relationships with others, both inside and outside the agency.
- Ability to communicate complicated information in a simple, consumer-friendly manner.

WHO MAY APPLY: Interested applicants must submit a completed Standard State Application (Form STD. 678) with an original signature to the contact/address listed below. Electronic applications will also be accepted. You must clearly indicate the basis of your eligibility (i.e. list, transfer, SROA/Surplus, reinstatement, etc.) including the following, RPA# 320-063 and Position #535-320-3518-001, in the "Explanation Section" of the STD 678. Resumes are welcome but do not take the place of the completed State Application STD 678. Applications will be screened for experience and only the most qualified will be contacted for an interview. NOTE: Failure to comply with the filing instructions and incomplete applications received will not be considered.

# APPLICANTS MUST SUBMIT A COMPLETED STANDARD STATE APPLICATION (FORM STD. 678) TO:

### **SUBMIT APPLICATIONS TO:**

Personnel Services Office

California Relay (Telephone) Service for the Deaf or Hearing-Impaired From hTDD Phones: 1-800-735-2929 STATE OF CALIFORNIA

## JOB OPPORTUNITY BULLETIN

CEC-8 (Revised 04/16) CALIFORNIA ENERGY COMMISSION

Attn: **RPA #320-063** 1516 9<sup>th</sup> Street, MS-3 Sacramento, CA 95814 Phone: 916-654-4309 From Voice Phones: 1-800-735-2922 personnelservices@energy.ca.gov

### JOB OPPORTUNITY BULLETIN GUIDELINES

The Job Opportunity Bulletin must be completed in the order of statements. Below is an explanation of each statement and whether or not it is optional or required.

**RECRUITMENT IS LIMITED TO EMPLOYEES OF THE CALIFORNIA ENERGY COMMISSION [OPTIONAL].** When the Commission is in a hiring freeze, all JOBs must include this statement. If, during a hiring freeze, the unit wishes external recruitment, approval to do so must be obtained in advance from the Executive Management Team.

**CLASSIFICATION** [REQUIRED]. Provide the full, civil service title of the position, spelling out the parenthetical if applicable (e.g., Associate Energy Specialist (Forecasting).

**TENURE [REQUIRED].** Provide either: Permanent, Limited-Term (include number of months) or Temporary (include number of months).

TENURE MAY BECOME PERMANENT IF THE CIRCUMSTANCES WHICH NECESSITATED THAT THE POSITION BE FILLED ON A LIMITED-TERM BASIS CHANGE AT A LATER DATE [OPTIONAL]. When circumstances necessitate a limited-term appointment, the originating unit may include this statement. However, please discuss the circumstances with your Personnel Analyst before including it on the J.O.B.

**TIME BASE [REQUIRED].** Provide either: Full-time, Part-time (include fraction) or Intermittent (include number of anticipated monthly hours).

**Will consider appointments less than full time [OPTIONAL].** If the originating unit will consider appointments to a time base less than the position's time base, this statement should be included on the JOB.

**SALARY [REQUIRED].** Provide the salary range. Provide each range if there is more than one.

**LOCATION** [REQUIRED]. Provide only the office name and/or division name, and Sacramento, California.

FINAL FILING DATE [REQUIRED]. Leave blank. The final filing date will be determined by the Personnel Analyst.

**DUTIES/RESPONSIBILITIES** [REQUIRED]. Briefly describe the primary duties of the position (from the duty statement).

**DESIRABLE EXPERIENCE/QUALIFICATIONS [REQUIRED].** Begin this section of the JOB with "The successful applicant should have," and briefly list the desirable, but not required, qualifications.

**WHO MAY APPLY [REQUIRED].** Use the language provided. Also if the position is a Bargaining Unit 2 or Bargaining Unit 9 classification, add "This position is subject to the "Super SROA" provisions of the State Restriction of Appointment (SROA) process."

[For Energy Analyst positions only] Prior to appointment to this classification, applicants will be required to pass an energy-related written technical assessment test ] [OPTIONAL]. All Energy Analyst JOBs must include this statement.

**Training & Development Assignments may be considered [OPTIONAL]**. If the originating unit wishes to consider Training and Development assignments, this statement must be added to the JOB.

**Miscellaneous statements here [OPTIONAL].** Statement(s) which are not appropriate to put under the other headings on the JOB may be included here. For example, "A typing test will be given as part of the interview."

INTERESTED APPLICANTS SHOULD SUBMIT A COMPLETED STANDARD STATE APPLICATION (FORM STD. 678) TO [REQUIRED]. Use the language provided. Insert the contact person's name, mailing address, and public and calnet phone numbers.